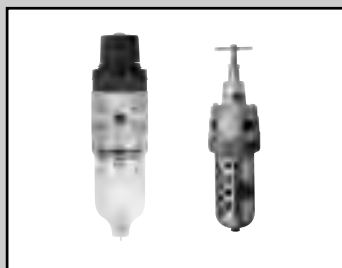
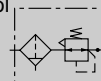


B7019/A7070/7080 Series

F.R. unit 7000 Series

Air filter/regulator integrated

● Port size: Rc 1/8 to Rc 3/4 JIS symbol



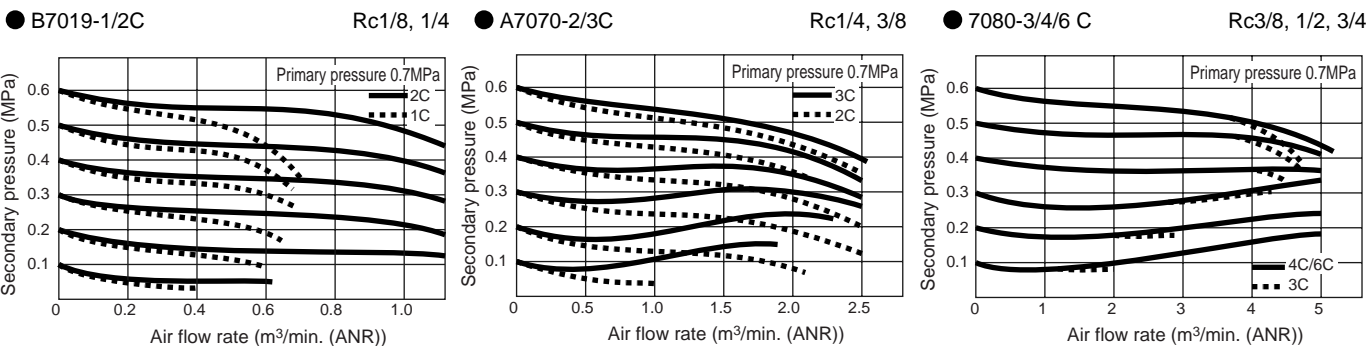
Specifications

Descriptions	B7019-1C/2C	A7070-2C/3C-E	A7070-2C/3C-EJ	7080-3C/4C/6C
Appearance				
Max. working pressure	MPa	1.0		
Withstanding pressure	MPa	1.5		
Fluid temperature (ambient temperature)	°C	5 to 65		
Filtration rating	μm	5		
Set pressure range	MPa	0.04 to 0.83		0.03 to 0.83
Relief		With relief mechanism		
Port size	Rc	1/8, 1/4	1/4, 3/8	3/8, 1/2, 3/4
Product weight	kg	0.4	1	1.1
Bowl guard	Custom order	Provided as standard		

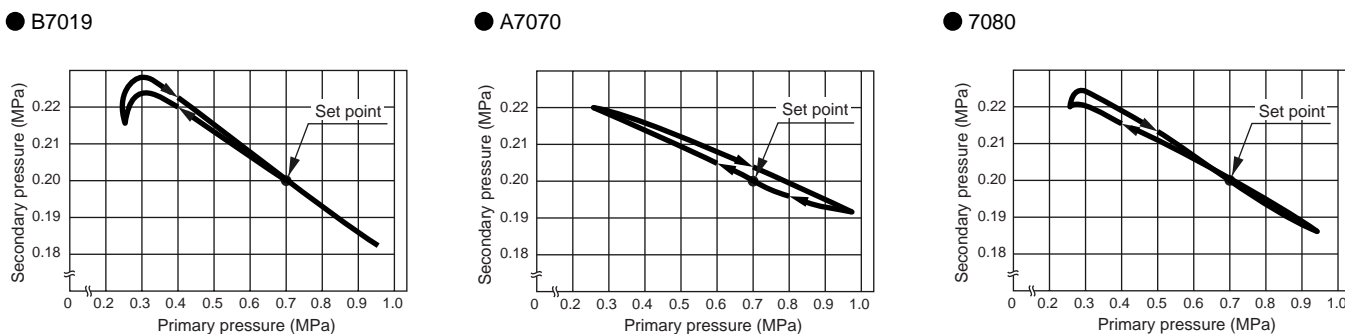
Note 1: Minimum working pressure of NO automatic drain with manual cock is 0.1MPa.

Note 2: If piston drain (D) is used, minimum working pressure is 0.1MPa. Do not use this product in the device with impact.

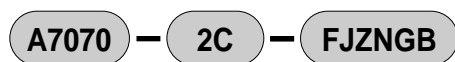
Flow characteristic



Pressure characteristic



How to order



A Model no.

B Port size
Note 1

C Option
Note 2
Note 3
Note 4
Note 5
Note 6
Note 7
Note 8
Note 10

<Example of model number>

A7070-2C-FJZNGB

Model: F.R. unit

A Model no.: Compact type

B Port size: Rc 1/4

C Option: NO automatic drain with manual cock, jumbo bowl, nylon bowl, non-relief, pressure gauge, bracket attached

Note on model no. selection

- Note 1: If NPT thread is required, do not indicate nominal size C. (E.g.) B7019-1
Pressure gauge for NPT thread is attached when pressure gauge is selected.
- Note 2: More than one optional symbol can be selected per "regulator" and "attachment".
- Note 3: Drainage "E" and bowl material "M" or "MG" can not be combined.
- Note 4: When selecting bowl material "M" or "MG" and attachment "G", indicate "M-G" or "MG-G".
- Note 5: If the pressure gauge is "L" for low-pressure, G49D-6-P04 is attached to B7019, and G59D-8-P04 is attached to A7070/A7070-J/7080. Refer to related components on page 691 for the specifications on pressure gauge
- Note 6: Automatic drain exhausts its drain automatically in no pressurized state during night time, etc. NO automatic drain with manual cock "F" is recommended, however, if flow rate is small in the circuit, NC automatic drain with manual cock "F1" can be selected.
- Note 7: Pressure gauge for "LG" is 0 to 0.4 MPa.
- Note 8: Refer to page 608 and 609 for attachment "B" bracket.
- Note 9: Refer to page 603 for How to order B7019 copper and PTFE free.
- Note 10: Refer to page 543 for the specifications of automatic drain.

Copper and PTFE free (page 603)

B7019 - - **P6**

		A Model no.				
		Miniature	Compact	Compact	Standard	
		B7019	A7070	A7070-J	7080	
Symbol	Descriptions					
B Port size						
1C	Rc1/8	●				
2C	Rc1/4	●	●	●		
3C	Rc3/8		●	●	●	
4C	Rc1/2				●	
6C	Rc3/4				●	
C Option						
Drainage	Blank	Manual cock		●	●	●
	Blank	Tire valve	●			
	E	Flexible drain		●	●	●
	F	NO automatic drain with manual cock (exhaust without pressurized)			●	●
	D	Piston drain	●			
Bowl	J	Jumbo bowl			Provided	
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl	●	●	●	●
	Q	Polycarbonate bowl with bowl guard	●			
	MG	Metal bowl with gauge		●	●	●
Element	Blank	5 μm	●	●	●	●
	X	3 μm		●	●	●
	Y	0.3 μm		●	●	●
Regulator	Blank	Standard	●	●	●	●
	N	Nonrelief	●	●	●	●
	K	Plastic knob		●	●	●
	L	For low pressure (0.02 to 0.34MPa)	●	●	●	●
Attachment	Blank	Not attached		●	●	●
	G	Pressure gauge	G49D-6-P10	G59D-8-P10	G59D-8-P10	G59D-8-P10
	B	Bracket	●	●	●	●

● Bracket No.	
6503	A7070/A7070 (J)
6502	7080
6166	B7019

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

Ending

F.R unit
F. R. L. unit

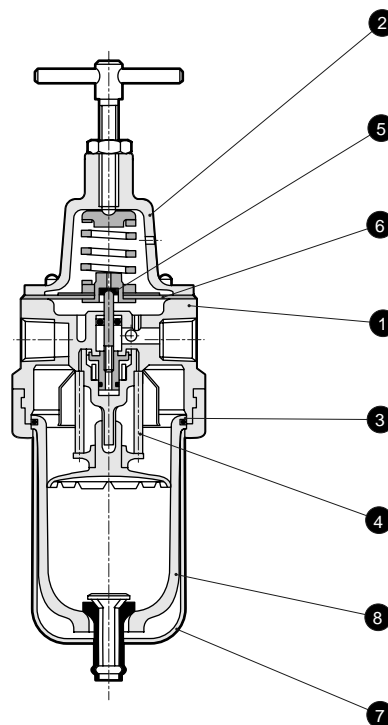
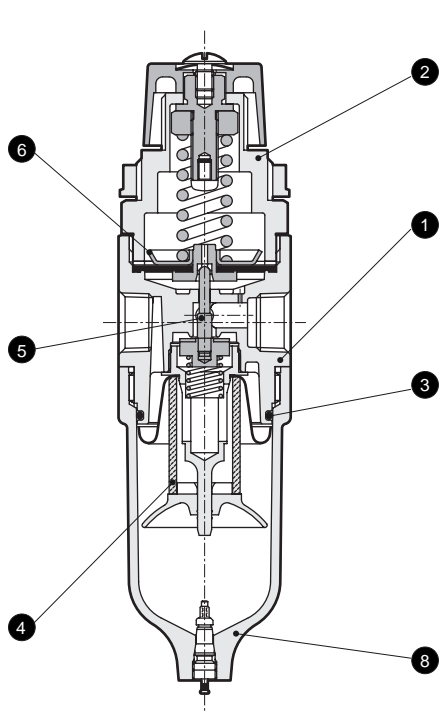
F.R Unit

Internal structure and parts list

● B7019

● A7070-E

● 7080-E



No.	Part name	Material		
		B7019	A7070	7080
1	Body	Aluminum alloy die-casting	Zinc alloy die-casting	
2	Guard	Polyacetal resin	Zinc alloy die-casting	
3	O ring	Special nitrile rubber		
4	Element	5 μ m	Polypropylene	
		3 μ m	-	Cotton
		0.3 μ m	-	Cotton, filter paper
5	Valve assembly	Brass, hydrogen nitrile rubber		
6	Diaphragm assembly	Nitrile rubber, brass, steel	Nitrile rubber, zinc alloy die-casting	
7	Bowl guard	-	Steel	
8	Bowl	Polycarbonate resin		

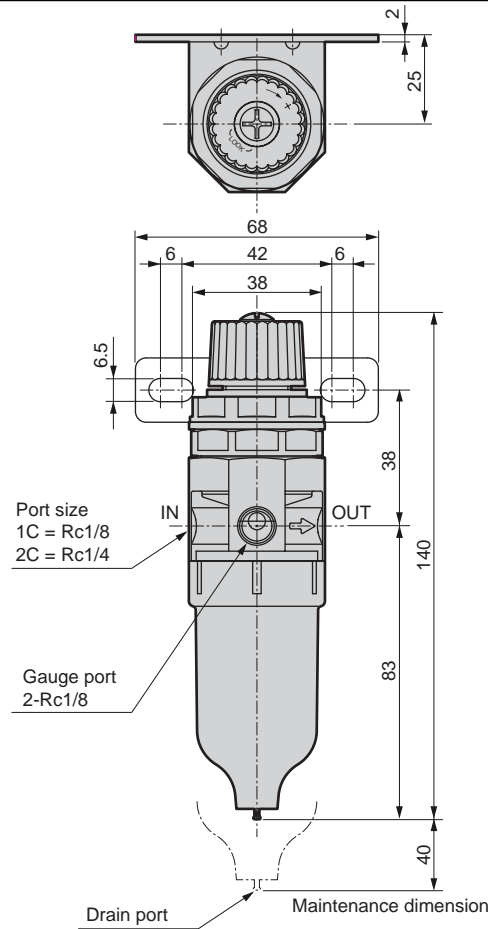
Repair parts list

No.	Part name	Model no.			
		B7019	A7070	7080	
4	Element	5 μ m	A1019-ELEMENT	1144-ELEMENT	1137-ELEMENT
		3 μ m	-	1144-ELEMENT-X	1137-ELEMENT-X
		0.3 μ m	-	1144-ELEMENT-Y	1137-ELEMENT-Y
5	Valve assembly	B7019-VALVE-ASSY	A7070-VALVE-ASSY	7080-VALVE-ASSY	
6	Diaphragm assembly	Relief type	B7019-DIAPHRAGM-ASSY	A2000-DIAPHRAGM-ASSY	2001-DIAPHRAGM-ASSY
		Nonrelief type	B7019-DIAPHRAGM-ASSY-N	A2000-DIAPHRAGM-ASSY-N	2001-DIAPHRAGM-ASSY-N

Dimensions

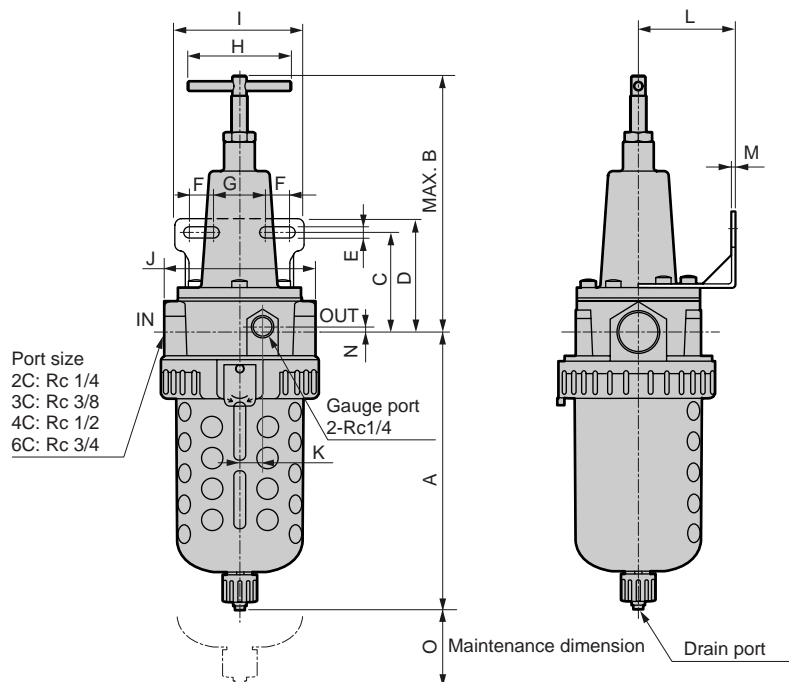


● B7019



● A7070

● 7080



Model no.	A					B	C	D	E	F	G	H	I	J	K	L	M	N	O	Port size
Combination option	Blank	E	F	M	FM	All models														
A7070	118	106	-	122	-	112	59	68	6.6	16	32	57	80	68	7	62.5	2.3	0	60	Rc1/4, 3/8
A7070-J	171	159	171	156	182	112	59	68	6.6	16	32	57	80	68	7	62.5	2.3	0	60	Rc1/4, 3/8
7080	174	165	174	157	183	166	64	74.5	7.0	15	32	63	80	92	14	60	2.3	2	90	Rc3/8, 1/2, 3/4

Note 1: A 5.7 to 6.0 bore size nylon tube is directly connected to manual cock type drain port.

Note 2: For metal bowl with automatic drain, drain port size is Rc1/4.

Note 3: Refer to pages 608 to 609 for dimensions of bracket.

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
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F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

Ending

F.R. unit
F. R. L. unit